

ABSTRACT

An image sensor has a pixel array where pixels having photoelectric conversion elements are arranged in a matrix, a plurality of row select lines which are arranged in a row direction, a plurality of column lines which are arranged in a column direction, a sample hold circuit disposed in each column line, a vertical scan circuit for generating vertical scan signals to sequentially select the plurality of row select lines, and a horizontal scan circuit for generating horizontal scan signals to sequentially select the output of the sample hold circuit. The vertical scan circuit sequentially selects and scans the plurality of row select lines within a first vertical scan period when the image sensor is controlled to a first frame period, and also sequentially selects and scans the plurality of row select lines within the first vertical scan period even when the image sensor is controlled to a second frame period, which is longer than the first frame period.